Lesson 1 Imperial Measures of Length

There are two main measurement systems used today in Canada:

- Systeme Internationale d'unites (SI) or the Metric System (millimetre, centimetre, metre, kilometre)
- Imperial System (inches, feet, yard, mile)

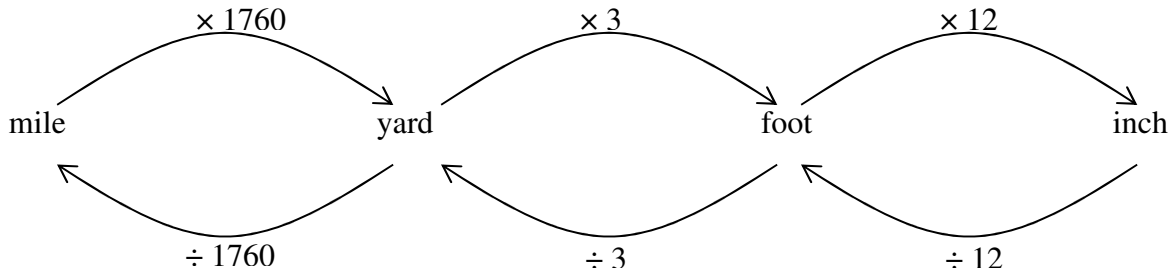
Imperial and Metric Ruler

Imperial – each inch is broken down into $\frac{1}{16}$in, with other units of measure being $\frac{1}{8}$ in, $\frac{1}{4}$ in, $\frac{1}{2}$in

Metric – each centimeter is broken down into 10 millimetres.

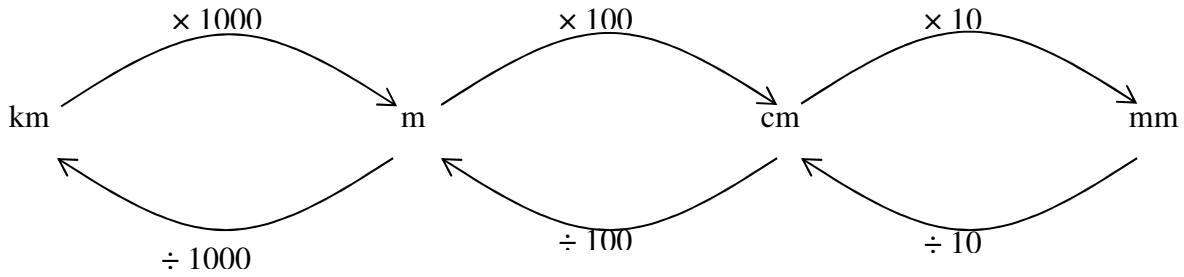
Imperial:

1 foot (1 ft or 1') = 12 inches (12 in or 12")
1 yard (1 yd) = 36 in or 3 ft
1 mile (1 mi) = 5280 ft or 1760 yd



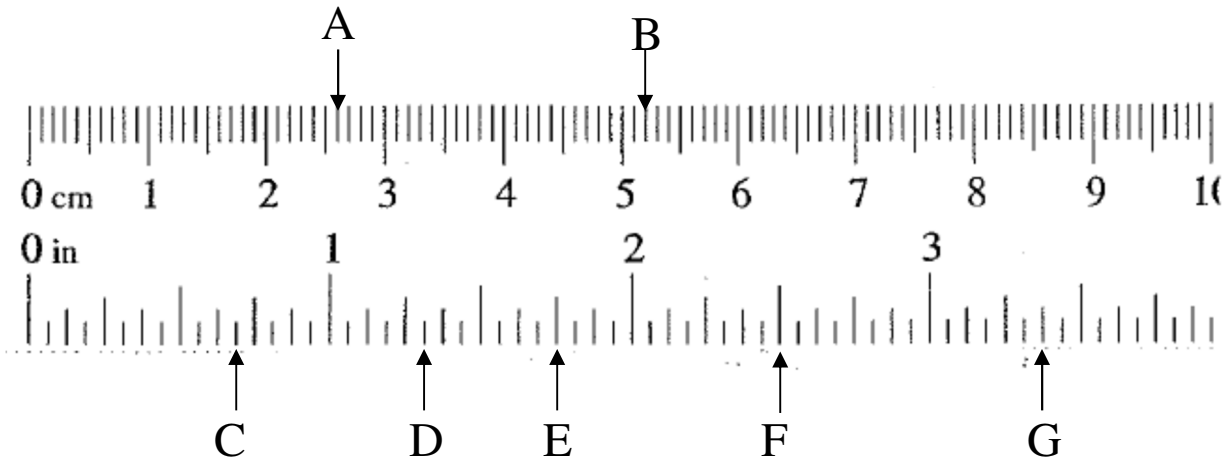
Metric:

1 cm = 10 mm
1 m = 100 cm
1 km = 1000 m



Estimation: Determine the most suitable units in both the imperial and metric systems for measuring the following:

	Metric	**Imperial**
Your height		
Distance from Winnipeg to Steinbach		
Height of Pop Can		
Length of a Sheet of Curling Ice		
Diameter of a Dime		



A = _____ **D =** _____ **F =** _____

B = _____ **E =** _____ **G =** _____

C = _____

Example 1 – Converting Between Imperial Units

Convert 5 yards to feet

Convert 51 inches to yards, feet and inches

3 ft 2 in + 7 ft 11 in

3 mi – 250 ft

Example 2 – Solving Problems Involving Converting Between Units

i.) Ben buys baseboard for a bedroom. The perimeter of the bedroom, excluding closets and doorway, is 37 ft.

a) Determine the length of baseboard is needed, in yards and feet.

b) The baseboard material is sold by the yard. It costs $5.99/yd. Determine the cost of the material, before taxes.

ii.) Tyrell has 4 yd. of cord to make friendship bracelets. Each bracelet needs 8 in. of cord. Determine the number of bracelets Tyrell can make.

Example 3 – Solving a Problem Involving Scale Diagrams

On the map with a scale of 1:4 750 000, the distance between Seward and Anchorage in Alaska is 1 ¾ in. Determine the distance between these two towns to the nearest mile.